

Agent's reference: 05-431-B

IN THE UNITED STATES RECEIVING OFFICE (RO/US)

In re Application of:)	
)	
Chang Jean JUNG)	Group Art Unit: TBA
)	
Serial No.: 10/560,769)	Examiner: TBA
)	
Filed: December 14, 2005)	
)	
For: CDMA Signal Generator Using an AWGN)	
Generator and a Saw Filter)	

TRANSMITTAL LETTER

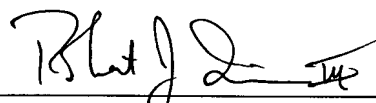
Mail Stop PCT
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450

Dear Sirs:

In regard to the above-identified application we are transmitting herewith the attached:

- 1) International Preliminary Report on Patentability;
- 2) **CERTIFICATE OF MAILING BY "EXPRESS MAIL" UNDER 37 CFR § 1.10:** The undersigned hereby certifies that this Transmittal Letter and the paper, as described hereinabove, are being deposited with the United States Postal Service with sufficient postage as "Express Mail Post Office to Addressee" in an envelope addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia, 22313-1450, on this 6th day of March, 2006, Express Mail No. **EV839411349US**.

Respectfully submitted,

By 
 Robert J. Irvine III
 Registration No. 41,865
 Attorney for the Applicant(s)

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

To:

YOON, Jee Hong
Hannuri Bldg.
219, Naeja-dong
Chongno-gu
Seoul 110-053
RÉPUBLIQUE DE CORÉE

Date of mailing (day/month/year)

09 February 2006 (09.02.2006)

Applicant's or agent's file reference
FE241493

IMPORTANT NOTICE

International application No.
PCT/KR2004/001879

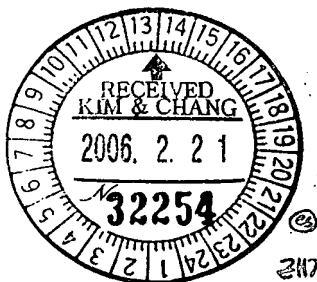
International filing date (day/month/year)
26 July 2004 (26.07.2004)

Priority date (day/month/year)
25 July 2003 (25.07.2003)

Applicant

UTSTARCOM KOREA LIMITED et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)



247L
27NR

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Philippe Becamel

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 70 90

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference FE241493	FOR FURTHER ACTION	See item 4 below
International application No. PCT/KR2004/001879	International filing date (<i>day/month/year</i>) 26 July 2004 (26.07.2004)	Priority date (<i>day/month/year</i>) 25 July 2003 (25.07.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant UTSTARCOM KOREA LIMITED		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																								
2.	This REPORT consists of a total of 4 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																							
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 740 14 35	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Date of issuance of this report 30 January 2006 (30.01.2006)</td> </tr> <tr> <td style="padding: 5px;">Authorized officer <div style="text-align: center; font-weight: bold;">Philippe Becamel</div></td> </tr> <tr> <td style="padding: 5px;">Telephone No. +41 22 338 70 90</td> </tr> </table>	Date of issuance of this report 30 January 2006 (30.01.2006)	Authorized officer <div style="text-align: center; font-weight: bold;">Philippe Becamel</div>	Telephone No. +41 22 338 70 90
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Authorized officer <div style="text-align: center; font-weight: bold;">Philippe Becamel</div>				
Telephone No. +41 22 338 70 90				

PATENT COOPERATION TREATY

REC'D 23 NOV 2004

WIPO

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From the
INTERNATIONAL SEARCHING AUTHORITY

To:

YOON, Jee Hong

Hannuri Bldg. 219 Naeja-dong, Chongno-gu, Seoul 110-053,
Republic of Korea

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) 11 NOVEMBER 2004 (11.11.2004)

Applicant's or agent's file reference

FE241493

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/KR2004/001879

International filing date (day/month/year)

26 JULY 2004 (26.07.2004)

Priority date(day/month/year)

25 JULY 2003 (25.07.2003)

International Patent Classification (IPC) or both national classification and IPC

IPC7 H04B 17/00

Applicant

UTStarcom Korea Limited et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.
For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

SONG, In Kwan

Telephone No. 82-42-481-5708



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/001879

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/001879

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1 - 4	YES
	Claims		NO
Inventive step (IS)	Claims	1 - 4	YES
	Claims		NO
Industrial applicability (IA)	Claims	1 - 4	YES
	Claims		NO

2. Citations and explanations :

1. Reference is made to the following document:

D: US 6,407,689 B1 (QUALCOMM INC.) 18 June 2002

2. The present invention relates to a CDMA Signal Generator which uses a relatively low priced AWGN generator and SAW filter in order to reduce the overall manufacturing costs thereof, eliminates the need for the costly CDMA signal generator while functioning substantially the same as the conventional CDMA generator and tests an RF equipment at the CDMA band as well as at the WCDMA band.

3. D is directed to Method and apparatus for controlling stages of a multi-stage circuit which provides a control mechanism that can be used to control a sigma-delta ADC to provide the required level of performance while reducing power consumption. The sigma-delta ADC is designed with multiple stages and provides improved performance as more stages are enabled. The control mechanism selectively enables a sufficient number of stages to provide the required performance and disables remaining stages to conserve power.

4. D does not disclose the characteristic of the present invention which can test the distortion characteristics of the RF block units without using the costly CDMA signal generating equipment.

5. It is thus believed that Claims 1 - 4 meet the criteria set out in PCT Article 33(2)-(4). D does not teach nor fairly suggest any of the components which are especially set forth in the claims. Therefore, Claims 1 - 4 have novelty, an inventive step and industrial applicability.